

## Abstract

5 The invention relates to a device for object recognition  
for an automotive passenger protection system, comprising a  
signal source (10), adapted to generate at least one  
electromagnetic wave (12), and a receiver (14) for the at  
least one electromagnetic wave (18) reflected by an  
10 obstacle (16). The inventive device is provided with an  
evaluation unit (20) that is adapted to evaluate the  
polarization of the at least one electromagnetic wave (18)  
reflected by the obstacle (16) and received by the receiver  
(14) and to generate at least one evaluation signal (22).  
15 The inventive device and method allow for obtaining  
additional information on the obstacle such as its surface  
structure and using the same for the automotive passenger  
protection system.